

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

REMARKS/ARGUMENTS

The above-identified application has been carefully reviewed and amended in light of the Examiner's communication mailed May 15, 2003.

Claims 5, 20 and 28 have been canceled, without prejudice, based on redundancy.

Independent claims 1, 18 and 26 have been amended in order to more clearly define the present invention over the references cited by the Examiner. More particularly, each of independent claims 1, 18 and 26 now includes the feature that the composite, composite component or fence rail/post, respectively, has a cross-sectional area having a substantially uniform size and shape along the entire length of the composite, composite component, or fence rail/post, respectively.

Dependent claims 6, 7, 21, 24 and 29 have been amended to correct for informalities, change dependencies, and to more clearly define the invention.

Each of these amendments is fully supported by the present specification, for example, the drawings and detailed description.

The Examiner has rejected claims 1-10 and 15-16 under 35 U.S.C. 103(a) as being as obvious over Sandt. Applicant traverses this rejection as is it pertains to the present claims.

Sandt does not disclose, teach or suggest the present invention. Sandt does not disclose, teach or even suggest a coextruded composite having a substantially uniform size and a substantially uniform shape along the entire length of the composite, as recited in the present claims. To the contrary, Sandt teaches a tapered pole having a non-uniform cross-section, for example, in terms of size along its length.

In the last response filed by applicant on February 20, 2003,

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

applicant amended the claims to more clearly define the invention as being a coextruded composite (hereinafter considered to include composite, composite component and fence component, for the sake of simplicity) having a substantially uniform cross section along the length thereof.

In response thereto, the Examiner states, on page 2 of the office action, that "[t]he limitations are merely related to the shape of the article...There is nothing on the record to show the particular shape of the pole is significant or is anything more than one of the numerous shapes a person of ordinary skill in the art would find obvious...therefor the shape of the pole, in itself would not render the claims patentable over Sandt."

Applicant has now further amended independent claims 1, 18 and 26 to more clearly define the invention as it is structurally distinguished from the prior art. Namely, the present amendments to the independent claims clarify that the present invention provides a layered composite that is a coextruded composite having a cross-sectional area of substantially uniform size and shape along the entire length of the composite.

Sandt discloses an article that has a tapering cross-section, i.e. the pole of Sandt, unlike the present invention, has a cross-sectional area of non-uniform size along its length. Sandt's pole is a "load bearing pole" designed and required to have a large bottom cross-sectional area, such that the pole bottom can be effectively stuck or fixed in the ground to support a load, and a relatively small top or above ground cross sectional area to reduce the above ground weight of the pole.

Importantly, Sandt's pole is always a tapering article, and is necessarily a tapering article. See, for example, column 1 lines 45-53 which reads (underlining mine):

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

"The article of manufacture is a tapered load-bearing structural member, such as a pole or beam with a large diameter end that may be buried in the ground or otherwise supported in a fixed manner or cantilevered out from a structure and a small diameter end that may be vertically above ground for supporting any of a variety of objects, e.g., power lines, telephone lines, illuminating lights or merely a wire fence."

In clear, direct and complete contrast, the composite of the present invention, as presently claimed, has a cross-section which has a substantially uniform size and shape along its entire length.

Applicant respectfully submits that the present amendments are merely clarifications of what was already claimed and do not therefor raise new issues.

In the earlier amendment filed on February 22, 2003, on page 5, line 5 of the last paragraph, the applicant noted that the term "substantially uniform" along the length, as pertaining to patentability of the claims over Sandt, refers to "constant in size and shape" along the length. The Examiner seems to have disregarded an important component of this limitation, and has primarily rejected the claims based on the Examiner's statement that:

"the shape of the pole in itself would not render the claims patentable over Sandt"
(Underlining mine).

Applicant submits that, the claims, as presently amended, clarify an important limitation of the present invention: that the present composites (unlike the Sandt poles) are "substantially

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

uniform in size and shape" along an entire length thereof.

Applicant further submits that the presently amended claims, include other important limitations as well that are not disclosed, taught or even remotely suggested by Sandt (or by any of the other references, as will be discussed hereinafter). For example, the composites of the present invention are "coextruded composites". As the Examiner has repeatedly recognized, Sandt does not disclose a coextruded composite, such as presently claimed.

More specifically, Sandt does not disclose, teach or even suggest a coextruded composite. Sandt discloses an article made of concentric sleeves having a space therebetween with a liquid resin deposited between the sleeves within the space. For example, Sandt states in column 3, lines 66 et seq.:

"The larger and smaller sleeves are formed by ordinary extrusion methods" and continues with "The larger sleeve 18 is positioned in a generally horizontal position...[t]he smaller sleeve is aligned so as to enter inside the larger sleeve and be pulled to align both ends and thereby produce a hollow tapered pole."

The pole of Sandt is made by a labor intensive method involving many steps, including extruding, separately, two rigid sleeves, positioning the sleeves within one another to define a hollow space therebetween, filling the space by pouring a liquid resin into the space, pulling the sleeves apart to align the fibers, and capping the ends so that the liquid resin remains in place. The number of steps and manual labor intensive nature of the steps of Sandt's process create substantial risk, and even likelihood, that the resulting article will not be consistently, or even acceptably, structured. For example, the amount and/or

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

location of the liquid resin in the hollow space may be highly variable and/or not uniform, resulting in thickened areas of resin, thinned areas of resin and/or areas of the hollow space which include none of the resin.

The present invention provides coextruded composites. The term "coextruded" as used in the present claims relates to composites which are consistently and uniformly structured. The presently claimed composites are coextruded composites having a cross-sectional area of a substantially uniform size and shape along the entire length of the composites. In other words, the coextruded composites of the present invention are structurally different and distinct from the mechanically assembled articles of Sandt, which are non-uniformly structured.

Applicant submits that the present claims, taken as a whole, are patentable over Sandt. For example, all the features of the present claims, for example, the substantially uniform size and shape of the cross sectional area of the present composites along the entire length of the composites, together with the present composites being coextruded composites render the claims patentable over Sandt.

In view of the above, applicant submits that the present claims, and in particular claims 1-10, 15 and 16, are unobvious from and patentable over Sandt under 35 U.S.C. 103(a).

The Examiner has rejected claims 11-14, 18-25, 34 and 36-40 under 35 U.S.C. 103(a) as being unpatentable over Sandt as applied to claim 1 in view of Finley. The Examiner argues that Finley supplies the missing feature of the wood fiber acrylonitrile/styrene/acrylic (ASA) polymeric material. Applicant traverses this rejection.

Applicant submits that even if the foamed resin wood filler of Finley were substituted for the liquid thermoplastic resin between

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

Sandt's telescoping sleeves, the resulting wood-filled tapered pole would not make obvious the present invention as defined in the present claims. Sandt and/or Finley, alone or combined as suggested by the Examiner, do not disclose, teach or even suggest a coextruded composite having a cross-sectional area with a substantially uniform size and shape along the entire length of the composite, as recited in the present claims.

The foamed polymer and wood fiber teachings of Finley do not supply the deficiencies apparent in Sandt.

In view of the above, applicant submits that the present claims, in particular claims 11-14, 18-25, 34 and 36-40, are unobvious from and patentable over Sandt in view of Finley under 35 U.S.C. 103(a).

The Examiner has further rejected claims 11, 13, 14, 18-21, 23-25, 34 and 36-40 as being unpatentable over Sandt as applied to claim 1 in view of Deaner et al or Hughes. The Examiner states that Sandt does not disclose the wood filled ASA as a reinforcing filler of the core. The Examiner states that Deaner et al and/or Hughes supplies this missing feature. Applicant traverses these rejections.

Applicant submits that Sandt in view of Deaner et al and/or Hughes does not disclose, teach, or even suggest the present invention as recited in the present claims. For example, neither Deaner et al nor Hughes, discloses, teaches or even suggests the present invention or supply the deficiencies apparent in Sandt. For example, neither Deaner et al nor Hughes discloses, teaches or even suggests a coextruded composite having a cross-sectional area with a substantially uniform size and shape along the entire length of the composite, as recited in the present claims.

In view of the above, applicant submits that the present claims, in particular claims 11, 13, 14, 18-21, 23-25, 34 and 36-

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

40, are unobvious from and patentable over Sandt in view of Deaner et al and/or Hughes under 35 U.S.C. 103(a).

The Examiner has further rejected claims 11-14, 18-25, 34 and 36-40 as being unpatentable over Sandt as applied to claim 1 in view of Stucky et al under 35 U.S.C. 103(a). Applicant traverses this rejection.

Stucky et al teaches a foamed polymer-fiber extruded composite. Stucky et al does not disclose, teach or even suggest the present invention, and does not supply the deficiencies apparent in Sandt. Applicant submits that the combination of Sandt and Stucky et al does not even suggest the presently claimed coextruded composites having a cross-sectional area with a substantially uniform size and shape along the entire length of the composites, as recited in the present claims.

In view of the above, applicant submits that the present claims, and in particular claims 11-14, 18-25, 34 and 36-40, are unobvious from and patentable over Sandt in view of Stucky et al under 35 U.S.C. 103(a).

Claims 26-31, 35, 41 and 42 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt in view of Finley and further in view of Kennedy et al, and as being unpatentable over Sandt in view of Stucky et al and further in view of Kennedy et al. Claims 26-30, 35 and 41 and 42 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt in view of Deaner et al or Hughes, and further in view of Kennedy et al. Applicant traverses each of these rejections.

Kennedy et al, which discloses a metal fence system, does not disclose, teach or even remotely suggest the present invention, and does not supply the deficiencies apparent in the teachings of Sandt or the other prior art.

Applicant resubmits the arguments presented hereinabove with

Appl. No. 09/761,331
Response C
Reply to Office Action of May 15, 2003

regard to the Examiner's rejections based on Sandt in view of Finley, Sandt in view of Stucky et al, and Sandt in view of Deaner et al or Hughes.

In brief, the combinations of these references, even in light of Kennedy et al, do not even suggest a fencing system defined in claim 26 in which each of the fence posts and fence rails comprises a coextruded composite having a cross sectional area with a substantially uniform size and shape along the entire length of each of the fence posts and fence rails. Kennedy et al does not supply the deficiencies apparent in Sandt, Finley, Stucky et al, Deaner et al, and/or Hughes.

In view of the above, applicant submits that the present claims, in particular claims 26-31, 35, 41 and 42, are unobvious from and patentable over Sandt, Finley, Stucky et al, Deaner et al, Hughes and Kennedy et al, alone or in any combination, under 35 U.S.C. 103(a).

In addition, applicant submits that each of the present dependent claims is separately patentable over the prior art. For example, none of the prior art disclose, teach or even suggest the composites, composite components or fencing systems including the additional feature or features recited in any of the present dependent claims. Therefore, applicant submits that each of the present claims is separately patentable over the prior art.

In conclusion, applicant has shown that the present claims are unobvious from and patentable over the prior art under 35 U.S.C. 103(a). Therefore, applicant submits that claims 1-4, 6-16, 18, 19, 21-27, 29-31, and 34-42 are allowable and respectfully requests the Examiner to pass the above-identified application to issuance

Appl. No. 09/761,331
R sponse C
Reply to Office Action of May 15, 2003

at an early date. Should any matters remain unresolved, the Examiner is requested to call (collect) applicant's attorney at the telephone number given below.

Respectfully submitted,



Frank J. Uxa
Attorney for Applicant
Reg. No. 25,612
4 Venture, Suite 300
Irvine, CA 92618
(949) 450-1750
Facsimile (949) 450-1764

FJU/LF